PROPOSED 15-DAY CHANGES TO REGULATIONS ESTABLISHING AND IMPLEMENTING A GREENHOUSE GASES EMISSION PERFORMANCE STANDARD FOR LOCAL PUBLICLY OWNED ELECTRIC UTILITIES

The proposed 15-day changes are indicated below in double strikeout and double underline.

Chapter 11. Greenhouse Gases Emission Performance Standard

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Article 2. Provisions Applicable to Powerplants Under 10 MW (Reserved)

Article 1. Provisions Applicable to Powerplants 10 MW and Larger

§ 2900 Scope

This Article only applies to covered procurements involving powerplants 10MW and larger.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Sections 8340 and 8341 Public Utilities Code.

§ 2901 Definitions

- (a) "Annualized plant capacity factor" means the ratio of the annual amount of electricity produced, measured in kilowatt hours, divided by the annual amount of electricity the powerplant could have produced if it had been operated at its maximum permitted capacity during all hours of the year, expressed in kilowatt hours.
- (b) "Baseload generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.
- (c) "Combined-cycle natural gas" means a powerplant that employs a combination of one or more natural gas turbines and one or more steam turbines in which electricity is produced in

the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.

- (d) "Covered procurement" means:
 - (1) A new ownership investment in a baseload generation powerplant, or
 - (2) A new or renewed contract commitment, including a lease, for the procurement of electricity with a term of five years or greater by a local publicly owned electric utility with:
 - (A) a baseload generation powerplant, unless the powerplant is deemed compliant, or
 - (B) any generating units added to a deemed-compliant baseload generation powerplant that combined result in an increase of 50 MW or more to the powerplant's rated capacity.
- (e) "Deemed-compliant powerplant" means any combined cycle natural gas powerplant that was in operation, or for which the Commission had granted a certificate pursuant to Chapter 6 of the Warren-Alquist State Energy Resources Conservation and Development Act on or before June 30, 2007.
- (f) "Dispatchable renewable resource" means any renewable resource that is not an intermittent renewable resource.
- (g) "Generating unit" means any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.
- (h) "Intermittent renewable resource" means a solar, wind, or run-of-river hydroelectricity powerplant.
- (i) "Local publicly owned electric utility" means a "local publicly owned electric utility" as defined in Public Utilities Code Section 9604.
- (j) "New ownership investment" means:
 - (1) Any investments in construction of a new powerplant;
 - (2) The acquisition of a new or additional ownership interest in an existing non-deemed compliant previously owned by others;
 - (3) Any investment in generating units added to a deemed-compliant powerplant, if such generating units result in an increase of 50 MW or more to the powerplant's rated capacity; or
 - (4) Any investment in an existing, non-deemed compliant powerplant owned in whole or part by a local publicly owned electric utility that:
 - (A) is designed and intended to extend the life of one or more generating units by five years or more, not including routine maintenance;
 - (B) results in an increase of greater than 10% in the rated capacity of the powerplant; or
 - (C) <u>is designed and intended to convert a non-baseload generation powerplant to a baseload generation powerplant.</u>
- (k) "Permitted capacity" means the rated capacity of the powerplant unless the maximum output allowed under the operating permit is the effective constraint on the maximum output of the powerplant.
- (l) "Powerplant" means a facility for the generation of electricity, and is:
 - (1) a single generating unit; or
 - (2) <u>multiple generating units that meet the following conditions:</u>
 - (A) the generating units are co-located;
 - (B) each generating unit utilizes the same fuel and generation technology; and

- (C) one or more of the generating units are operationally dependent on another.
- (m) "Rated capacity" means the powerplant's maximum rated output. For combustion or steam generating units, rated capacity means generating capacity and shall be calculated pursuant to Section 2003.
- (n) "Specified contract" means a contract that only provides for electricity from one or more identified powerplant(s).
- (o) <u>"System energy" means energy purchased from unspecified resources.</u> "Unspecified energy" means energy purchased from unspecified resources.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Sections 8340 and 8341, Public Utilities Code.

§ 2902 Greenhouse Gases Emission Performance Standard

- (a) The greenhouse gases emission performance standard (EPS) applicable to this chapter is 1100 pounds (0.5 metric tons) of carbon dioxide (CO₂) per megawatt hour (MWh) of electricity.
- (b) <u>Unless otherwise specified in this Article, no local publicly owned electric utility shall</u> <u>participate in enter into a covered procurement if greenhouse gases emissions from the powerplant(s) subject to the covered procurement exceed the EPS.</u>
- (c) For purposes of applying the EPS to contracts with multiple powerplants, each specified powerplant must be treated individually for the purpose of determining the annualized plant capacity factor and net emissions, and each powerplant must comply with the EPS.
- (d) The term of a contract shall be determined by includinging the length of time from the date of first delivery through the date of last delivery, even if there are intervening periods during which there are no deliveries.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2903 Compliance with the Emission Performance Standard

- (a) Except as provided in Subsection (b), a powerplant's compliance with the EPS shall be determined by dividing the powerplant's annual average carbon dioxide emissions in pounds by the powerplant's annual average net electricity production in MWh. This determination shall not be based on full load heat rates. Capacity capacity factors, heat rates, and corresponding emissions rates shall that reflect the expected operations of the powerplant and not on full load heat rates.
- (b) The following types of powerplants are determined to be compliant with the EPS:
 - (1) Except as otherwise specified, any Any in-state or out-of-state powerplant that meets the criteria of a renewable electricity generation facility as defined in Chapter 8.6 of Division 15 of the identified in Public Resources Code Section 25741(a)(1) and (3), and as specified by guidelines adopted thereunder pursuant to Public Resources Code Section 25747(a), except for hybrid systems;
 - (2) Powerplants using only biomass fuels that would otherwise be disposed of utilizing open burning, forest accumulation, spreading, composting, uncontrolled landfill, or landfill utilizing gas collection with flare or engine. Biomass includes but is not limited to agricultural waste, wood waste, and landfill gas;

- (3) Hydroelectric powerplants; or
- (4) Nuclear powerplants.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Sections 25741 and 25747, Public Resources Code; Section 8341, Public Utilities Code.

§ 2904 Annual average carbon dioxide emissions

- (a) Except as provided in Subsections (b) and (c), a powerplant's annual average carbon dioxide emissions are the amount of carbon dioxide produced on an annual average basis by each fuel used in any component directly involved in electricity production, including, but not limited to, the boiler, combustion turbine, reciprocating or other engine, and fuel cell. The fuels used in this calculation shall include, but are not limited to, primary and secondary fuels, backup fuels, and pilot fuels, and the calculation shall assume that all carbon in the fuels is converted to carbon dioxide. Fuels used in ancillary equipment, including, but not limited to, fire pumps, emergency generators, and vehicles shall not be included.
- (b) For powerplants not eligible for renewable portfolio standard certification that use biomass fuels in combination with other fuel(s), the powerplant's annual average carbon dioxide emissions are the amount of carbon dioxide produced on an annual average basis by all fuels used other than biomass, biogas or landfill gas.
- (c) For covered procurements that employ geological formation injection for CO₂ sequestration, the annual average carbon dioxide emissions shall not include the carbon dioxide emissions that are projected to be successfully sequestered. The EPS for such powerplants shall be determined based on projections of net emissions over the life of the powerplant. Carbon dioxide emissions shall be considered successfully sequestered if the sequestration project meets the following requirements:
 - (1) Includes the capture, transportation, and geologic formation injection of CO₂ emissions;
 - (2) Complies with all applicable laws and regulations; and
 - (3) Has an economically and technically feasible plan that will result in the permanent sequestration of CO₂ once the sequestration project is operational.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2905 Annual average electricity production

- (a) Except as provided in Subsection (b), a powerplant's annual average electricity production in MWh shall be the sum of the net electricity available for all of the following: use onsite or at a host site in a commercial or industrial process or for sale or transmission from the powerplant.
- (b) For the purposes of calculating compliance with the EPS, a cogeneration powerplant's annual average electricity production is the sum of the MWh of electricity produced and the useful thermal energy output expressed in MWh.
 - (1) Useful thermal energy output means:
 - (A) For a topping cycle cogeneration powerplant, the thermal energy that:

- (i) is made available to an industrial or commercial process, including, but not limited to, the net of any heat contained in condensate return or makeup water;
- (ii) is used in a heating application, including, but not limited to, space or domestic hot water heating; or
- (iii) is used in a space cooling application, including, but not limited to, thermal energy used by an absorption chiller.
- (B) For a bottoming cycle cogeneration powerplant, including, but not limited to, industrial waste-heat powered generators, the thermal energy used by an industrial process and any fuel used for supplemental firing.
- (2) The useful thermal energy output shall be converted into a MWh equivalent using the standard engineering conversion factor of 3.413 MMBtu per MWh (or 3413 Btu per kWh).

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2906 Substitute Energy

- (a) Except as provided for below, a contract with a term of five years or more that includes the purchase of system unspecified energy is not compliant with the EPS.
- (b) A new contract for covered procurement from identified powerplants may contain provisions for the seller to substitute deliveries of energy under any of the following circumstances:
 - (1) The substitute energy only comes from one or more identified powerplants, each of which is EPS-compliant.
 - (2) For specified contracts with non-renewable resources or dispatchable renewable resources, or a combination of each, system unspecified energy purchases for each identified powerplant are permitted up to 15% of forecast energy production of the identified powerplant over the term of the contract, provided that the contract only permits the seller to purchase system unspecified energy under either of the following conditions:
 - (A) The identified powerplant is unavailable due to a forced outage, scheduled maintenance or other temporary unavailability for operational or efficiency reasons; or
 - (B) To meet operating conditions required under the contract, including, but not limited to, provisions for the number of start-ups, ramp rates, or minimum number of operating hours.
 - (3) For specified contracts with intermittent renewable resources, the amount of system energy substitute energy purchases from unspecified resources is limited such that total purchases under the contract, whether from the intermittent renewable resource or from system energy substitute unspecified resources, do not exceed the total reasonably expected output of the identified renewable powerplant over the term of the contract.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2907 Qualifying Facilities

The emission performance standard shall not apply to any qualifying small power production facility or qualifying cogeneration facility, as defined by 16 U.S.C. Section 796 (17) and (18), that is the subject of an obligation to purchase pursuant to 16 U.S.C Section 824a-3.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§2907 Request for Commission Evaluation of a Prospective Procurement

- (a) A local publicly owned electric utility may request that the Commission evaluate a prospective procurement for any of the following:
 - (1) a determination as to whether a prospective procurement would extend the life of a power plant by 5 years;
 - (2) a determination as to whether a prospective procurement would constitute routine maintenance; or
 - (3) a determination as to whether a prospective procurement would be in compliance with the EPS.
- (b) <u>A request for evaluation under this section shall be treated by the Commission as a request for investigation under Chapter 2, Article 4 of the Commission's regulations.</u>

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2908 Public Notice

Each local publicly owned electric utility shall post notice in accordance with Government Code Section 54950 et seq. whenever its governing body will deliberate in public on a covered procurement.

- (a) At the posting of the notice of a public meeting to consider a covered procurement, the local publicly owned electric utility shall notify the Commission of the date, time and location of the meeting so the Commission may post the information on its website. This requirement is satisfied if the local publicly owned electric utility provides the Commission with the uniform resource locator (URL) that links to this information.
- (b) Upon distribution to its governing body of information related to a covered procurement's compliance with the EPS, for its consideration at a noticed public meeting, the <u>local publicly</u> owned electric utility shall make such information available to the public and shall provide the Commission with an electronic copy of the document for posting on the Commission's website. This requirement is satisfied if the local publicly owned electric utility provides the Commission with the URL that links to the documents or information regarding other manners of access to the documents.
- (c) For a covered procurement involving a new or renewed contract with a term of five years or more, the documentation made publicly available at the time of posting pursuant to Subsections (a) and (b) shall include at a minimum:
 - (1) A description of the terms of the contract and option(s) to extend the contract:
 - (2) A description and identification of the powerplant(s) providing energy under the contract, including, but not limited to, power generation equipment and fuel type;

- (3) A description of the design or operation of the powerplant(s) so as to indicate whether or not the powerplant(s) operates to supply baseload generation;
- (4) An explanation as to how the contract is compliant with the EPS; and
- (5) <u>Supporting documents or information that allow for assessment of compliance with the standard, including, but not limited to, staff assessments and reports to the local publicly owned electric utility's governing body, planned or historical production and fuel use data, and applicable historical continuous emissions monitoring data.</u>
- (d) For a covered procurement involving a new ownership investment, the documentation made available at the time of posting pursuant to Subsections (a) and (b) shall include at a minimum:
 - (1) For new construction or purchase of an existing generating unit or powerplant, a description and identification of the planned powerplant or the purchased asset specifying the power generating equipment, power source, such as fuel type, wind, or biomass, all supplemental fuel sources, and all available historical production and fuel use data;
 - (2) For an incremental investment that is a covered procurement as defined in Section 2901(d), a description of the modifications to the unit(s) and their impact on generation capacity, carbon dioxide emissions, and planned operation.
 - (3) For non-renewable resources, the heat rate or carbon dioxide emissions profile of the powerplant and the source of this information.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code; Section 54950, Government Code.

§ 2909 Compliance Filings

Within ten (10) business days after a local publicly owned electric utility enters into a covered procurement, the local publicly owned electric utility shall submit a compliance filing to the Commission regarding the covered procurement. The compliance filing shall contain one paper copy with original signature and one electronic copy of the following:

- (a) An attestation, signed under penalty of perjury by an agent of the local publicly owned electric utility authorized by its governing body to sign on its behalf, that:
 - (1) the governing body has reviewed and approved in a noticed public meeting both the covered procurement and the compliance filing;
 - (2) <u>based on the governing body's knowledge, information or belief, the compliance filing</u> does not contain a material misstatement or omission of fact;
 - (3) <u>based on the governing body's knowledge, information or belief, the covered</u> procurement complies with this Article; and
 - (4) the covered procurement contains contractual terms or conditions specifying that the contract or commitment is void and all energy deliveries shall be terminated no later than the effective date of any Commission decision pursuant to Section 2910 that the covered procurement fails to comply with this Article.
- (b) The documentation for the covered procurement as listed in Section 2908(c) if the covered procurement is a new or renewed contract or 2908(d) if the covered procurement is a new ownership investment.

- (c) For any covered procurement utilizing carbon sequestration pursuant to Section 2904(c), documentation demonstrating that Subsections 2904(c)(1)-(3) have been met.
- (d) For any covered procurement that permits system unspecified energy purchases, the source data and methodology the local publicly owned electric utility used in developing the level of expected output from the identified powerplants, in order to demonstrate that the limits for system unspecified energy purchases were properly established.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2910 Compliance Review

The executive director shall review each compliance filing and make a recommendation to the full Commission on whether the covered procurement complies with this Article. The executive director may, within 14 days after receipt of a compliance filing, notify the local publicly owned electric utility in writing that the compliance filing was not complete, and shall specify what information is missing from the filing. The Commission shall consider the executive director's recommendation and shall, within 30 days after receipt of a complete compliance filing, issue a decision on whether the covered procurement described in the compliance filing complies with this Article. The Commission decision shall become effective 30 days after the date of the decision.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2911 Compliance Investigation

The Commission may on its own motion, or as a result of a request from any person, including, but not limited to, a member of the public, staff, or other agency, conduct a complaint or investigation proceeding, or both, pursuant to Chapter 2, Article 4, to determine a local publicly owned electric utility's compliance with this chapter. In conducting such a proceeding, the Commission may require the production of information and documents beyond those made available to the public during consideration of the covered procurement or submitted with the compliance filing, including, but not limited to, contracts, staff assessments and reports to the utility's governing board, land use and air quality permits, continuous emissions monitoring data, and other information or documents that may aid in assessing compliance with this chapter.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2912 Case-by-Case Review for Reliability or Financial Exemptions

- (a) A local publicly owned electric utility may petition the Commission for an exemption from application of this chapter to a covered procurement that would not comply with the EPS. In order to qualify for an exemption The Commission may grant an exemption for covered procurements under this section if the local publicly owned electric utility must demonstrates that:
 - (1) the covered procurement is necessary to address system reliability concerns; or

- (2) extraordinary circumstances, catastrophic events, or threat of significant financial harm will arise from implementation of this chapter-due to unforeseen eircumstances not previously contemplated in the establishment of this Article.
- (b) Upon receipt of a petition, the executive director shall review and make a recommendation to the full Commission on whether to grant the petition. The executive director may, within 14 days after receipt of a petition, notify the local publicly owned electric utility in writing of any additional information needed to review the petition. The Commission shall consider the executive director's recommendation and shall issue a decision on whether to grant the petition within 30 days after receipt of the complete petition.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

§ 2913 Case-by-Case Review for Pre-existing Multi-Party Commitments

- (a) A local publicly owned electric utility may petition the Commission for an exemption from application of this chapter for covered procurements required under the terms of a contract or ownership agreement that was in place January 1, 2007. The Commission may exempt covered procurements from application of this chapter if the local publicly owned electric utility demonstrates that:
 - (1) the covered procurements are required under the terms of the contract or ownership agreement; and
 - (2) the contract or ownership agreement does not afford the local publicly owned electric utility applying for the exemption the opportunity to avoid making such covered procurements.
- (b) <u>Upon receipt of a petition under this section, the executive director shall review and make a recommendation to the full Commission on whether to grant the petition. The executive director may, within 14 days after receipt of a petition, notify the local publicly owned electric utility in writing of any additional information needed to review the petition. The Commission shall consider the executive director's recommendation and shall issue a decision on whether to grant the petition within 30 days after receipt of the complete petition.</u>

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.

Article 2. Provisions Applicable to Powerplants Under 10 MW (Reserved)